

ASME QEI-1–2013
(Revision of ASME QEI-1–2010)

Standard for the Qualification of Elevator Inspectors

AN AMERICAN NATIONAL STANDARD



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Mechanical Engineers**

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**The American Society of
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FOREWORD

Participants from the National Association of Elevator Safety Authorities, the National Elevator Industries, Inc., the American Insurance Association, and the Alliance of American Insurers met in early 1981 to discuss the trend among state and municipal governments to rely on private inspection agencies and self-inspection by elevator companies to perform inspections that had traditionally been done by the jurisdictional authorities. One of the prime concerns of the group was to develop a means for ensuring that the quality of the inspections remained at a high level. The group determined that addressing the qualifications of the persons performing the inspections is an important part of achieving this goal.

The American Society of Mechanical Engineers (ASME), which had been actively involved in elevator safety through the sponsorship of the A17 Elevator and Escalator Committee, was asked to participate in the group's discussions. ASME expressed an interest in this project and established an ad-hoc committee consisting of members of the above organizations to develop a scope and guidelines for the establishment of a standards-writing committee.

On November 12, 1981, the ASME Council on Codes and Standards responded to this request and approved the formation of the ASME Committee on the Qualification of Elevator Inspectors (QEI Committee) to develop an American National Standard.

The goal established for the QEI Committee is to provide for the public health, safety, and welfare by supplementing existing standards in this field. ASME A17.1, Safety Code for Elevators and Escalators, covers design, construction, operation, inspection, testing, maintenance, alteration, and repair. ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks, supplements the Safety Code by providing guidelines for the inspection and testing of the equipment. Neither A17.1 nor A17.2, however, covers the qualifications of inspection personnel, and the duties of the inspector are only covered briefly in the Introduction to the Inspectors' Manual.

The excellent safety record of elevators, escalators, and related equipment has been maintained, in part, by quality field inspections and tests. However, advancing technology and safety requirements have highlighted the need for establishing uniform criteria for the persons performing these inspections. The quality of inspections, of course, depends on the competence of the inspector, and the Standard for the Qualification of Elevator Inspectors is dedicated to that purpose.

Safety codes and standards are intended to enhance public health and safety. Revisions result from committee consideration of factors such as technological advances, new data, and changing environmental and industry needs. Revisions do not imply that previous editions were inadequate.

With the harmonization of ASME A17.1 and CSA B44, the application of the QEI Standard is now widespread in Canada. To enable the effective use of the QEI Standard by the jurisdictions in Canada enforcing codes other than those published by ASME, the QEI Standard was revised in the 2007 edition to include reference to equivalent Canadian codes. The reference to any Canadian standard and access to or possession of those standards is necessary only in Canada or where the standards are adopted or enforced.

In the 2013 edition, the QEI-1 Standard was revised to reflect a decision made by ASME to discontinue its QEI accreditation program. Effective January 1, 2014, accreditation of organizations which certify elevator inspectors and inspection supervisors is being discontinued by the American Society of Mechanical Engineers; therefore, requirements have been revised in this area to allow for accreditation to be done by other organizations.

This revision of QEI-1 was approved by the American National Standards Institute on September 27, 2013.



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PREFACE

PURPOSE

This Standard is intended for the purpose of establishing uniform criteria, which will aid in

(a) qualifying and training of inspection personnel for government agencies, insurance companies, elevator companies, building owners, and managers

(b) providing guidance for accredited certifying organizations

It is also intended to serve as a guideline on which certification is based by detailing the expertise necessary in performing inspections.

It is recommended that state, municipal, and other jurisdictional authorities reference this Standard in their governing regulations covering subjects included in this Standard. Model language for enforcement authorities to recognize certified inspectors and inspection supervisors from accredited certifying organizations is shown in Nonmandatory Appendix D.

FORM AND ARRANGEMENT

The Foreword, Preface, and Appendices are included in this Standard for information only. They have been approved by the A17 Standards Committee. The requirements therein are nonmandatory.

RELATED PUBLICATIONS

This Standard is one of the numerous codes and standards that have been developed and published by The American Society of Mechanical Engineers. These and publications of other organizations, all of which may be of special interest to users of this Standard, are listed in Nonmandatory Appendix A.

CORRESPONDENCE WITH THE A17 STANDARDS COMMITTEE

ASME codes and standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may

interact with the committee by requesting interpretations, proposing revisions, and attending committee meetings. Correspondence should be addressed to

Secretary, A17 Standards Committee
The American Society of Mechanical Engineers
Two Park Avenue
New York, NY 10016-5990

Proposing Revisions. Revisions made to this Standard will incorporate changes that appear necessary or desirable as demonstrated by the experience gained from its application and in order to conform to developments in the elevator field. Approved revisions will be published in the next edition.

The committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a description of the reason(s) for the proposal, including any pertinent documentation.

Requesting Interpretations. ASME issues written replies to inquiries concerning interpretation of technical aspects of this Standard. Interpretations are published on the ASME Web site under the Committee Pages at <http://cstools.asme.org>. Interpretations can only be rendered in response to a written request sent to the Secretary of the A17 Standards Committee.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect the interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME committee or subcommittee. ASME does not “approve,” “certify,” “rate,” or “endorse” any person, company, organization, item, construction, proprietary device, or activity.

Attending Committee Meetings. The A17 Standards Committee regularly holds meetings that are open to the public. Persons wishing to attend any meeting should contact the Secretary of the A17 Standards Committee.



ASME QEI-1–2013

SUMMARY OF CHANGES

Following approval by the ASME QEI Committee and ASME, and after public review, ASME QEI-1–2013 was approved by the American National Standards Institute on September 27, 2013.

ASME QEI-1–2013 includes editorial changes, revisions, and corrections introduced in ASME QEI-1–2010 as well as the following changes identified by a margin note, (13).

<i>Page</i>	<i>Location</i>	<i>Change</i>
x	Preface	Revised
1, 2	1.1.2	Revised
	1.1.3	(1) Deleted (2) Original paras. 1.1.4 and 1.1.5 redesignated as new paras. 1.1.3 and 1.1.4, respectively
	Section 1.2	(1) Terms <i>accredited certifying organization</i> and <i>current edition</i> revised (2) Terms <i>Certificate of Accreditation</i> , <i>certification manual</i> , <i>certification program</i> , and <i>QEI logo</i> deleted
	1.3(f)	Revised
	1.3(l)	Added
3	Section 1.4	(1) Title revised (2) New first paragraph added (3) Second paragraph revised (4) Last paragraph deleted
	1.4(o)	Added
	1.5.1	First paragraph added
	1.5.2	(1) Title revised (2) Subparagraph (c)(2) revised (3) Subparagraph (c)(3) added (4) Subparagraph (d) redesignated as subparagraph (e), and new subparagraph (d) added
	Section 1.6	Revised
	Section 1.7	Deleted
5	2.1(o)	Revised
	2.1(p)	Revised
9	Part 4	Revised in its entirety
11	A-3	Revised
	A-4(c)	Added



<i>Page</i>	<i>Location</i>	<i>Change</i>
	A-5	(1) Redesignated as A-6 (2) New A-5 added
12	A-6	Redesignated as A-7
	A-7	Redesignated as A-8
	A-8	Redesignated as A-9
	A-9	(1) Redesignated as A-11 (2) New A-10 added
14	Nonmandatory Appendix C	QEI logo deleted from Front of Sample Certification Card
15	Nonmandatory Appendix D	Title and paragraph revised
16	Nonmandatory Appendix E	Revised in its entirety
18	Nonmandatory Appendix F	(1) Title revised (2) Mandatory language removed
20	Nonmandatory Appendix G	(1) Subtitle revised (2) Mandatory language removed

SPECIAL NOTE:

The interpretations to QEI-1 are included in this edition as a separate section for the user's convenience.



STANDARD FOR THE QUALIFICATION OF ELEVATOR INSPECTORS

Part 1 Introduction

SECTION 1.1 SCOPE

1.1.1 Inspectors and Inspection Supervisors

This Standard includes requirements for the qualification, duties, and responsibilities of inspectors and inspection supervisors engaged in the inspection and testing of

(a) hoisting and lowering mechanisms, equipped with a car or platform, that move between two or more landings. This equipment includes, but is not limited to, the following:

(1) elevators (ASME A17.1/CSA B44) and, in Canadian jurisdictions, special purpose personnel elevators (CSA B311)

(2) platform and stairway chairlifts (ASME A18.1 or CSA B355)

(b) power-driven stairways and walkways for carrying persons between landings. This equipment includes, but is not limited to, the following:

(1) escalators (ASME A17.1/CSA B44)

(2) moving walks (ASME A17.1/CSA B44)

(c) hoisting and lowering mechanisms equipped with a car that serves two or more landings and is restricted to the carrying of material by its limited size or limited access to the car. This equipment includes, but is not limited to, the following:

(1) dumbwaiters (ASME A17.1/CSA B44)

(2) material lifts and dumbwaiters with automatic transfer devices (ASME A17.1/CSA B44)

(d) hoists and elevators (ANSI/ASSE A10.4 or CSA Z185) that are

(1) not an integral part of buildings

(2) installed inside or outside buildings or structures during construction, alteration, or demolition operations

(3) used to raise and lower workers and other personnel connected with or related to the structure

NOTE: Nonmandatory Appendix B also includes recommended qualifications and duties of inspector trainees.

1.1.2 Certification and Accreditation

(13)

Inspectors and inspection supervisors shall be certified in accordance with the requirements of this standard. The organization which certifies the inspectors and inspection supervisors shall be accredited by an independent, internationally or nationally recognized organization that accredits personnel certification bodies to ANSI/ISO/IEC 17024, or its equivalent.

1.1.3 Covered Inspections

(13)

This Standard applies to any person who is making an inspection to determine compliance with the requirements of ASME A17.1/CSA B44, ASME A17.3, CSA B44.1/ASME A17.5, ASME A18.1 or CSA B355, and ANSI/ASSE A10.4 or CSA Z185. It applies to persons typically employed by, but is not limited to, the following:

(a) jurisdictional authorities

(b) independent inspection agencies and elevator consultants

(c) insurers of the equipment

(d) manufacturers, installers, and maintainers of the equipment

(e) building owners and managers

(f) testing laboratories performing field inspections and tests (see also para. 1.1.5)

1.1.4 Exempt Inspections

(13)

This Standard does not cover personnel engaged in engineering and type testing as covered in Section 8.3 of ASME A17.1/CSA B44, Section 8 of ASME A18.1 or Appendix A of CSA B355, and CSA B44.1/ASME A17.5, including inspection by laboratories in association with these tests.

SECTION 1.2 DEFINITIONS

(13)

Terms used in this Standard shall have the meanings specified in the following definitions. Other terms used



shall have the meanings specified in Section 1.3 of ASME A17.1/CSA B44 and Section 3 of ANSI/ASSE A10.4 or CSA Z185.

accredited certifying organization: a certifying organization that holds valid Documentation of Accreditation issued by an independent internationally or nationally recognized accrediting organization that accredits personnel certification bodies.

NOTE: A Certificate of Accreditation is an example of such documentation.

ASME: The American Society of Mechanical Engineers.

certified inspection supervisor: a person certified by an accredited certifying organization as meeting the requirements of Part 3 of this Standard.

certified inspector: a person certified by an accredited certifying organization as meeting the requirements of Part 2 of this Standard.

certifying organization: an organization that certifies that persons are qualified to perform the duties of an inspector or inspection supervisor.

CEU: continuing education unit.

continuing education credit: one instructional contact hour equals 0.1 CEU.

current edition: the edition of the ASME A17 documents now being followed by the respective authority having jurisdiction.

equivalent field: a field that deals with electronic, electrical, mechanical (including hydraulic), and safety principles to the same degree of complexity as found in elevators.

inspection supervisor: a person meeting the qualifications of Section 3.1 who is responsible for the supervision of inspectors and inspector trainees.

inspector: a person meeting the qualifications of Section 2.1 who is engaged in the inspection and testing of equipment within the scope of ASME A17.1/CSA B44.

inspector trainee: a person who is being trained to become an inspector.

latest edition: the latest edition in effect or the specific edition referenced by ASME A17.1/CSA B44, ASME A18.1 or CSA B355, and ANSI/ASSE A10.4 or CSA Z185. Where the referenced standard does not include an effective date and a specific edition is not referenced in ASME A17.1/CSA B44, ASME A18.1 or CSA B355, and ANSI/ASSE A10.4 or CSA Z185, the effective date shall be 6 mo from the date of publication. More recent editions may be used.

SECTION 1.3 QE1 REFERENCED STANDARDS

(a) References to ASME A17.1/CSA B44 refer to the latest edition of ASME A17.1/CSA B44, an American

National Standard and a National Standard of Canada.

(b) References to ASME A17.2 refer to the latest edition of Guide for Inspection of Elevators, Escalators, and Moving Walks.

(c) References to the National Electrical Code or Canadian Electrical Code refer to the latest edition of ANSI/NFPA 70, National Electrical Code, or Canadian Electrical Code C22.1.

(d) References to ANSI/ASSE A10.4 refer to the latest edition of Safety Requirements for Personnel Hoists and Employee Elevators, or references to CSA Z185 refer to the latest edition of the Safety Code for Personnel Hoists.

(e) References to building codes refer to the latest editions of the following:

- (1) National Building Code
- (2) Standard Building Code
- (3) Uniform Building Code
- (4) International Building Code
- (5) National Building Code of Canada

(f) References to standards regarding accessibility for people with disabilities refer to the latest editions of the following: (13)

- (1) ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities, an American National Standard
- (2) ADAAG, Americans with Disabilities Act Accessibility Guidelines
- (3) ADA/ABAAG, Americans with Disabilities Act/Architectural Barriers Act Accessibility Guidelines
- (g) References to ASME A17.3 refer to the latest edition of ASME A17.3, Safety Code for Existing Elevators and Escalators, an American National Standard.

(h) References to B44.1/A17.5 refer to the latest edition of CSA B44.1/ASME A17.5, Elevator and Escalator Electrical Equipment, a National Standard of Canada and an American National Standard.

(i) References to ASME A18.1 or CSA B355 refer to the latest edition of ASME A18.1, Safety Standard for Platform Lifts and Stairway Chairlifts, or CSA B355, Lifts for Persons with Physical Disabilities.

(j) References to the Safety Handbook refer to the latest edition of the Elevator Industry Field Employees' Safety Handbook.

(k) References to CSA B311 refer to the latest edition of CSA B311, Safety Code for Manlifts. Any reference to a manlift is intended to equate to the Special Purpose Elevator identified in ASME A17.1/CSA B44.

(l) References to International Standard ANSI/ISO/IEC 17024: First edition, 2003-04-01, Conformity assessment — General requirements for bodies operating certification of persons, is a well-established authoritative standard for accrediting organizations that certify people. (13)

NOTE: See Nonmandatory Appendix A for related documents.



(13)

SECTION 1.4 ACCREDITED CERTIFYING ORGANIZATION REFERENCE STANDARDS

Accredited certifying organizations with limited scope shall be required to hold only those documents that apply to that program.

The following list contains documents that shall be held by each accredited certifying organization:

(a) current editions of ASME A17.1/CSA B44 and all previous editions with supplements of ASME A17.1, Safety Code for Elevators and Escalators, and CSA B44, Safety Code for Elevators

(b) current edition with supplements of ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks

(c) current and all previous editions with supplements of ASME A17.3, Safety Code for Existing Elevators and Escalators

(d) current edition of ASME A17.4, Guide for Emergency Personnel

(e) current and all previous editions with supplements of CSA B44.1/ASME A17.5, Elevator and Escalator Electrical Equipment

(f) all published interpretations of A17 documents from June 14, 1972 through to most current

(g) current edition of A17.1 Handbook

(h) current and all previous editions, beginning with 1972 edition, of the National Electrical Code, the 1990 edition of the Canadian Electrical Code

(i) current and all previous editions, beginning with 1981 edition, of the International, National, Standard, and Uniform Building Codes, the 1990 edition of the National Building Code of Canada

(j) current edition of ICC/ANSI A117.1 and ADAAG accessibility standards

(k) latest edition of the Elevator Industry Field Employees' Safety Handbook

(l) current and all previous editions with supplements of ASME A18.1, Safety Standard for Platform Lifts and Stairway Chairlifts, or CSA B355, Lifts for Persons with Physical Disabilities

(m) current and all previous editions with supplements of CSA B311, Safety Code for Manlifts

(n) current and all previous editions with supplements of ANSI/ASSE A10.4, Safety Requirements for Personnel Hoists and Employee Elevators, or CSA Z185, Safety Code for Personnel Hoists

(13) (o) current edition of International Standard ANSI/ISO/IEC 17024, Conformity assessment — General requirements for bodies operating certification of persons

SECTION 1.5 CERTIFIED ELEVATOR INSPECTOR AND CERTIFIED ELEVATOR INSPECTOR SUPERVISOR REFERENCE STANDARDS

1.5.1 Personal Possession

(13)

Inspectors and inspection supervisors shall have in their personal possession the current edition of the documents listed below as required by their respective authority having jurisdiction

(a) ASME A17.1/CSA B44, Safety Code for Elevators and Escalators

(b) ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks

(c) ANSI/NFPA 70, National Electrical Code, or Canadian Electrical Code C22.1

(d) ASME A17.3, Safety Code for Existing Elevators and Escalators

(e) ASME A18.1, Safety Standard for Platform Lifts and Stairway Chairlifts, or CSA B355, Lifts for Persons with Physical Disabilities

(f) ANSI/ASSE A10.4, Safety Requirements for Personnel Hoists and Employee Elevators, or CSA Z185, Safety Code for Personnel Hoists

(g) Elevator Industry Field Employees' Safety Handbook

1.5.2 Access To

(13)

(a) CSA B44.1/ASME A17.5, Elevator and Escalator Electrical Equipment

(b) building codes

(1) National Building Code

(2) Standard Building Code

(3) Uniform Building Code

(4) International Building Code

(5) National Building Code of Canada

(c) standards regarding accessibility for people with disabilities

(1) ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities

(2) ADAAG, Americans with Disabilities Act Accessibility Guidelines

(3) ADA/ABAAG, Americans with Disabilities Act/Architectural Barriers Act Accessibility Guidelines

(d) fire protection codes

(1) NFPA 13 Standard for the Installation of Sprinkler Systems

(2) NFPA 72 National Fire Alarm and Signaling Code

(e) published interpretations of codes and standards referenced in paras. 1.5.1 and 1.5.2

SECTION 1.6 CREDENTIALS

(13)

Inspectors and inspection supervisors shall not state or imply that they are certified by ASME or by an accrediting body.



Part 2

Qualifications and Duties of Inspectors

SECTION 2.1 QUALIFICATIONS

An inspector shall meet the definition of *elevator personnel* in ASME A17.1/CSA B44, Section 1.3 and have documented training and at least 1 yr of experience performing inspections and performing or witnessing tests specified in ASME A17.1/CSA B44, CSA B311, ASME A18.1 or CSA B355, and ANSI/ASSE A10.4 or CSA Z185. Verifiable evidence of training and experience shall be documented with the application for certification to the accredited certifying organization. An inspector shall also verify that he or she meets the following qualifications (see Nonmandatory Appendix B for the recommended qualifications and duties of inspector trainees):

(a) knowledge of personal safety practices, including, but not limited to, the safety practices contained in the Safety Handbook necessary to perform the following:

(1) acceptance inspections of new construction
(2) routine and periodic inspections of existing equipment

(3) inspections of equipment in hazardous environments, where applicable

(b) familiarity with industry terminology, including the following:

(1) terms defined and used in ASME A17.1/CSA B44, CSA B311, ASME A18.1 or CSA B355, and ANSI/ASSE A10.4 or CSA Z185

(2) terms used in ASME A17.2

(3) terms defined and used in the National Electrical Code

(4) administrative terminology used by the jurisdictional authority

(c) ability to read architectural and installation drawings, including hoistway and machine room layouts

(d) working knowledge of electrical, electronic, and circuit construction principles, including but not limited to

- (1) voltage, currents, and resistance
- (2) series and parallel circuits
- (3) grounding
- (4) ability to read circuit diagrams

(e) knowledge of the purpose and function of safety devices in the following locations:

- (1) machine rooms and machinery spaces
- (2) hoistways
- (3) on the cars

(4) pits

(5) escalators, moving walks, and other related equipment

(f) working knowledge of mechanical principles as applied to structures, machines, mechanisms, and the effects of traction on ropes and sheaves

(g) working knowledge of hydraulic principles as applied to the operation of valves, pumps, plungers, piping, and buffers

(h) working knowledge of the various types of equipment; their code requirements, uses, and limitations; local regulations; and any special problems or applications as included in ASME A17.1 or CSA B44, ASME A17.1/CSA B44, CSA B311 (past and present), ASME A18.1 or CSA B355, ANSI/ASSE A10.4 or CSA Z185, and QE1-1 and awareness of published interpretations of the Standards Committees

(1) classifications of usage

(a) passenger elevators

(b) freight elevators (Classes A, B, C1, C2, and C3)

(c) private residence elevators

(d) sidewalk elevators

(e) special purpose personnel elevators

(f) inclined elevators

(g) material lifts and dumbwaiters with automatic transfer devices

(h) dumbwaiters

(i) elevators used for construction

(j) personnel hoists and employee elevators

(2) classifications of driving means

(a) traction

(b) winding drum

(c) hydraulic (direct-plunger hydraulic, electrohydraulic, maintained-pressure hydraulic, and roped hydraulic)

(d) screw machine

(e) rack and pinion

(f) hand

(g) belt and chain drives

(3) escalators and moving walks

(4) inclined and vertical wheelchair lifts and stairway chairlifts (ASME A17.1b-1998 and earlier)

(i) working knowledge of the functions and operation of elevator systems, including machines, motors, governors, and other machine room equipment; controllers; position devices; door operator systems; hoistway systems; safety system testing and functions; pit equipment



escalators; moving walks; electrical devices; and hydraulics

(j) working knowledge of inspection and testing procedures as described in ASME A17.2 and awareness of published interpretations of those procedures

(k) working knowledge of applicable building, fire, electrical, and accessibility codes

(l) demonstrated ability to perform the duties specified in Section 2.2

(m) working knowledge of the requirements of ASME A17.3 and awareness of published interpretations of ASME A17.3

(n) awareness of B44.1/A17.5 and Standards Committee published interpretations to the extent that it is specified in ASME A17.1/CSA B44 and ASME A18.1 or CSA B355

(13) (o) must have in his or her personal possession the latest edition of QEI-1 and access to Standards Committee published interpretations, as well as the current editions of the documents required by the respective authority having jurisdiction and listed in para. 1.5.1

(13) (p) must have access to current editions of documents referenced in para. 1.5.2

SECTION 2.2 DUTIES

The duties of an inspector include the following:

(a) making acceptance inspections and witnessing tests to determine whether all parts of the installation conform to the requirements of the applicable code or regulations and whether the required safety devices function as required therein

(b) making routine or periodic inspections and witnessing tests of existing installations to determine that the equipment is in apparent safe operating condition, has not been altered except in conformity to the applicable code or regulations, and performs in accordance with test requirements

(c) reporting the results of the inspection and testing in accordance with the appropriate administrative procedures and the following:

(1) the certified inspector's report shall include a clear description of the scope of the inspection performed, including the type of inspection (acceptance, periodic, or routine) and whether or not the inspection was performed in accordance with the applicable requirements of ASME A17.1/CSA B44, Section 8.10, or 8.11; ASME A18.1, Section 10, or CSA B355, Appendix A2; or ANSI/ASSE A10.4, Section 26, or CSA Z185, Section 24. If any other type of inspection was performed, the report shall include a complete description of the scope of the inspection. The ASME checklist forms as published by ASME for electric elevators, hydraulic elevators, and escalators and moving walks shall only be used when the inspection complies with

the requirements in ASME A17.1/CSA B44, Section 8.10 or 8.11.

(2) the report shall be signed by the certified inspector and shall include his or her certification number and certifying agency.

(3) all Code deficiencies noted in the report shall include a reference to the applicable code and rule number(s).

(4) the report shall include the date and time that the inspection was conducted.

(d) maintain his or her personal copy of QEI-1 to be the latest edition, as well as the current edition of documents referenced in para. 1.5.1

SECTION 2.3 MAINTENANCE OF QUALIFICATIONS

In order to maintain qualifications as an elevator inspector, an individual shall

(a) become familiar with the applications of new technology, including the electronic and material fields.

(b) maintain knowledge of current local administrative or operating procedures necessary to discharge duties.

(c) maintain knowledge of recent revisions and awareness of published interpretations of ASME A17.1/CSA B44, ASME A17.2, ASME A17.3, CSA B311, ASME A18.1 or CSA B355, ANSI/ASSE A10.4 or CSA Z185, and awareness of B44.1/A17.5 to the extent specified in ASME A17.1/CSA B44 and ASME A18.1 or CSA B355, as well as the applicable requirements in building, fire, electrical, and accessibility codes.

(d) comply with the code of ethics (code of conduct) established by the accredited certifying organization (see para. 4.1).

(e) have in his or her possession the latest edition of ASME QEI-1 and published interpretations as well as the current edition of documents referenced in para. 1.5.1, plus access to the documents referenced in para. 1.5.2. The inspector shall attest to compliance with the above in writing or by electronic submission upon certification and annual renewal of certification.

(f) obtain 1.0 continuing education unit (CEU) on an annual basis by participating in continuing education and professional development activities acceptable to the accredited certifying organization. Continuing education credit may be awarded for a wide variety of activities that involve training, education, or other endeavors wherein the objective includes achieving relevant professional knowledge, skills, and abilities beyond those required for initial certification.

(1) *Accruing CEUs*

(a) During the 12-mo period prior to the renewal application date, the inspector shall accrue the CEUs



required. The inspector shall keep documents and records of each activity during the renewal period.

(b) An affidavit shall be submitted along with the certification renewal confirming that the information is accurate. A renewal applicant shall retain documentation for 2 yr from the date of the renewal. The documentation for any activities relating to CEUs shall be submitted upon request to the accredited certifying organization.

(2) *Acceptable Continuing Education Credit and Professional Development Activities*

(a) participation as a student in a seminar or technical session delivered by an accredited certifying organization, or approved by an accredited certifying organization and delivered by a related professional association, state code enforcement licensing agency, standards writing organization, or any related federally sponsored program. Each clock hour of attendance is equivalent to 0.1 CEUs.

(b) touring of manufacturing or testing facilities directly related to elevator technology being presented in an associated classroom training session. A maximum of 0.5 CEUs may be credited per annual renewal period.

(c) successful completion of a self-study course related to elevator technology and its related disciplines, offered by an accredited certifying organization, state code enforcement licensing agency, or accredited academic institution equivalent to not more than 0.2 CEUs per annual renewal period.

(d) successful completion of an online renewal update course shall be acceptable for not more than 0.2 CEUs per annual renewal period.

(e) instruction of a seminar, or technical session delivered for a related professional association, state code enforcement licensing agency, accredited certifying organization, standards writing organization, or any

related federally sponsored program shall be acceptable for 0.1 CEUs for each clock hour of instruction delivered.

(f) serving as an officer, member, or alternate on an A17.1 or A18.1 ASME committee (Standards Committee, Subcommittee, Working Group, Project Team, Ad Hoc), CSA B355 or CSA B44 Committee (Subcommittee, Working Group, Project Team, Ad Hoc), ANSI/ASSE A10.4 (Subcommittee, Working Group, Project Team, Ad Hoc), or CSA Z185 (Subcommittee, Working Group, Project Team, Ad Hoc) for 1 yr shall be acceptable for 0.1 CEUs per committee meeting attended.

(g) attending an A17.1/B44, A18.1 ASME, or CSA B355 committee (Standards Committee, Subcommittee, Working Group, Project Team, Ad Hoc) meeting shall be acceptable for 0.05 CEUs per committee meeting attended.

(h) attendance at in-house training during employment as an inspector or inspection supervisor directly related to the performance of duties other than ASME code issues shall be acceptable for 0.1 CEUs per clock-hour of attendance, not to exceed 0.4 CEUs per annual renewal period.

(i) participation as a student in an accredited academic institution in coursework related to the elevator industry in the area of mechanics, electrical, electronic, and hydraulic fields shall be acceptable for 0.1 CEUs for each academic credit, not to exceed 0.6 CEUs per certification year.

(j) publication of a paper, book, or technical article for an academic institution or professional trade journal related to elevator devices shall be acceptable for 0.3 CEUs per published article, not to exceed 0.6 CEUs annually.

(k) participation in an organization's internal management meetings is not eligible for equivalent CEUs.



Part 3

Qualifications and Duties of Inspection Supervisors

SECTION 3.1 QUALIFICATIONS

An inspection supervisor shall have the qualifications of Section 2.1 and the following:

- (a) demonstrated aptitude for leadership, administration, and management (should acquire management training within the first year).
- (b) demonstrated in-depth knowledge of the applicable codes.
- (c) demonstrated ability to perform the administrative and technical duties in Section 3.2. An inspection supervisor shall also meet one of the following experience requirements:
 - (1) 5 yr of experience as an elevator inspector or in a job in an equivalent field at an equivalent level, 2 yr of which must have been spent dealing directly with elevator inspections.
 - (2) 4 yr of experience as an elevator inspector and a diploma or certificate of successful completion from a technical/vocational school (including high school) in an equivalent field.
 - (3) 3 yr of experience as an elevator inspector and a bachelor's degree in an equivalent field.
 - (4) 2 yr of experience as an elevator inspector and a bachelor's degree in engineering from an accredited school in an equivalent field.
- (d) must have in his or her personal possession the latest edition of QEI-1, as well as the current editions of the documents referenced in para. 1.5.1.
- (e) must have workplace access to current editions of documents referenced in para. 1.5.2.

SECTION 3.2 DUTIES

3.2.1 Administrative

The administrative duties of an inspection supervisor include, but are not limited to, the following:

- (a) scheduling of inspections and assignments
- (b) training of inspectors and, where appropriate, others requiring elevator safety familiarity
- (c) development of budget
- (d) selection of new inspectors and trainees
- (e) maintenance and analysis of records that include records of inspections, accident reports, and inspector performance, including inspector compliance with the requirements of Section 2.2

(f) personnel matters, such as performance appraisals and disciplinary actions

(g) handling public relations matters and serving as a liaison to concerned parties

(h) mediation of disputes

(i) assuring that inspectors under his or her supervision perform their duties in compliance with the requirements of Section 2.2

(j) maintain his or her personal copy of QEI-1 to be the latest edition, as well as the current edition of documents referenced in para. 1.5.1

3.2.2 Technical

The technical duties of an inspection supervisor include, but are not limited to, the following:

- (a) reviewing inspection reports and ensuring enforcement of legally adopted requirements
- (b) reviewing applications for waivers and variances and making recommendations to proper authorities as required
- (c) mediating disputes
- (d) answering questions on Code and obtaining formal interpretations from code-developing organizations
- (e) actively participating in relevant code-developing committees on national, regional, or local levels
- (f) assuring review of elevator plans and drawings
- (g) investigating complaints and accidents
- (h) helping to develop local policies and laws and advocating adoption of the latest national codes

SECTION 3.3 MAINTENANCE OF QUALIFICATIONS

To maintain the qualifications as an inspection supervisor, an inspection supervisor shall

- (a) conform to the requirements of Section 2.3. In addition, candidates renewing a supervisory certification shall have an additional 0.3 CEUs in classroom coursework offered by an accredited certifying organization, state code enforcement licensing agency, or accredited academic institution equivalent related to management or supervision techniques.



(b) attend or conduct at least one professional level seminar or workshop per year related to one or more of the above duties.

(c) spend a minimum of 10% of work time with the inspectors in the field or demonstrate a combination of providing training, administration, or support for QEI inspectors actively engaged in the performance of inspections.

(d) have in his or her possession the latest edition of ASME QEI-1, as well as the current edition of documents referenced in para. 1.5.1, plus workplace access to the documents referenced in para. 1.5.2. The inspection supervisor shall attest to compliance with the above in writing or by electronic submission upon certification and annual renewal of certification.



Part 4

Requirements for Accredited Certifying Organizations

(13)

SECTION 4.1 CODE OF ETHICS (CONDUCT)

Accredited certifying organizations shall establish a code of ethics (conduct) and policy on conflict of interest and means for implementation and enforcement. Non-mandatory Appendices E, F, and G provide guidance to satisfy the requirements in this section for a code of ethics (conduct).

A list shall be made available to the public and shall be posted on the accredited certifying organization's Web site. The list shall contain the inspector's or supervisor's name, state of residence, certification number, and expiration date. The public listing shall be updated a minimum of every 30 days.

SECTION 4.2 PUBLIC DISCLOSURE OF INSPECTORS' AND INSPECTION SUPERVISORS' IDENTITIES

Accredited certifying organizations shall maintain a current list, including addresses, of all certified persons.



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NONMANDATORY APPENDIX A RELATED DOCUMENTS

This Nonmandatory Appendix includes descriptions of internationally, nationally, or regionally recognized documents pertinent to the inspection of elevators, escalators, and related equipment. The jurisdictional authority should be consulted to determine whether or not these codes and standards are legally in force, the applicable editions, and the existence of modifications or additions to the requirements.

A-1 ELEVATOR CODES

ASME A17.1/CSA B44, Safety Code for Elevators and Escalators, covers the design, construction, operation, inspection, testing, maintenance, alteration, and repair of elevators, escalators, dumbwaiters, moving walks, material lifts and dumbwaiters with automatic transfer devices, vertical and inclined wheelchair lifts, and stairway chairlifts (publisher: ASME).

ASME A17.3, Safety Code for Existing Elevators and Escalators, covers retroactive requirements for electric and hydraulic elevators, and escalators (publisher: ASME).

CSA B311, Safety Code for Manlifts, specifies minimum requirements for the design, construction, installation, operation, inspection, testing, alteration, and maintenance of permanently installed manlifts for the vertical transportation of authorized personnel and, where authorized, their tools and equipment. Such manlifts are typically installed in structures such as grain elevators, radio antennas, bridge towers, underground facilities, dams, power plants, pulp mills, and similar structures (publisher: CSA).

ANSI/ASSE A10.4, Safety Requirements for Personnel Hoists and Worker Elevators, covers the design, construction, installation, operation, inspection, testing, maintenance, alterations, and repair of hoists and elevators that are not an integral part of buildings and are installed inside or outside buildings or structures during construction, alteration, and demolition operations and are used to raise and lower workers and other personnel connected with or related to the structure (publisher: ASSE).

CSA Z185, Safety Code for Personnel Hoists, covers structures and hoists that are not a permanent part of buildings, structures, or other works and that are used during construction, alteration, or demolition to raise and lower persons and/or materials connected with or related to a building project (publisher: CSA).

A-2 ELECTRICAL CODES

ANSI/NFPA 70, National Electrical Code, or Canadian Electrical Code C22.1 covers the installation of electric conductors and equipment in buildings and other structures. National Electrical Code Article 620 or Canadian Electrical Code Section 38 of these codes pertain specifically to elevators, escalators, and related equipment (publishers: NFPA and CSA).

ASME A17.1/CSA B44, Safety Code for Elevators and Escalators, requires electrical equipment to be certified to CSA B44.1/ASME A17.5, Elevator and Escalator Electrical Equipment (publishers: ASME and CSA).

A-3 BUILDING CODES

(13)

The following are the most widely used building codes in the United States and Canada. They include requirements relative to the construction of hoistways, venting, standby (emergency) power, and means of egress.

- (a) International Building Code (publisher: ICC)
- (b) National Building Code (publisher: BOCA)
- (c) Standard Building Code (publisher: SBCCI)
- (d) Uniform Building Code (publisher: ICBO)
- (e) National Building Code of Canada (publisher: NBCC)

A-4 ACCESSIBILITY STANDARDS

The following three standards include specifications for making elevators accessible to, and usable by, people with disabilities:

- (a) ICC/ANSI A117.1, American National Standard, Accessible and Usable Buildings and Facilities (publisher: ICC)
- (b) ADAAG, Americans with Disabilities Act Accessibility Guidelines (publisher: US Access Board)
- (c) ADA/ABAAG, Americans with Disabilities Act/Architectural Barriers Act Accessibility Guidelines (publisher: US Access Board)

(13)

A-5 FIRE PROTECTION CODES

(13)

The following codes are referenced in ASME A17.1/CSA B44 and include requirements relative to emergency operations and equipment located in hoistways and machinery spaces:

- (a) NFPA 13, Standard for the Installation of Sprinkler Systems
- (b) NFPA 72, National Fire Alarm and Signaling Code



(13) A-6 INSPECTORS' GUIDE

ASME A17.2, Guide for Inspection of Elevators, Escalators, and Moving Walks, provides recommended inspection and testing procedures for elevators, escalators, and moving walks, based on the requirements of ASME A17.1/CSA B44. It also includes pertinent information on the inspection of equipment installed under earlier editions of ASME A17.1/CSA B44 and other information useful to the inspector.

(13) A-7 INTERPRETATIONS OF A17 PUBLICATIONS

Interpretations of the various A17 publications are issued periodically. The interpretations of A17.1 and A17.2, approved by the A17 Committee from June 14, 1972 through June 14, 1979, were published in a book in 1980. A second book of interpretations, covering the period from June 1979 through May 1989, was published in 1989. Both interpretation books are available from ASME. Starting in 1981, interpretations have been published with each new edition and supplement of the applicable standard (publisher: ASME).

(13) A-8 PLATFORM LIFT AND STAIRWAY CHAIRLIFT STANDARD

ASME A18.1, Safety Standard for Platform Lifts and Stairway Chairlifts, and CSA B355, Lifts for Persons with Physical Disabilities, cover the design, construction, installation, operation, inspection, testing, maintenance, and repair of inclined stairway chairlifts and inclined and vertical platform lifts intended for transportation of a mobility impaired person only. The device has a limited vertical travel, operating speed, and platform area.

(13) A-9 HANDBOOKS

The following handbooks augment the applicable codes with comments, diagrams, and illustrations that are intended to clarify the intricate requirements of the codes. They are especially useful in the training of new inspectors.

(a) Handbook on ASME A17.1/CSA B44, Safety Code for Elevators and Escalators (publisher: ASME)

(b) The National Electrical Code Handbook (contains complete text of National Electrical Code; publisher: NFPA)

(c) ADA and Building Transportation, A Handbook on Accessibility Regulations for Elevators, Wheelchair Lifts, and Escalators (publisher: Elevator World, Inc.)

(d) Elevator Industry Field Employees' Safety Handbook (publisher: Elevator World, Inc.)

A-10 CONFORMITY ASSESSMENT STANDARD (13)

International Standard ANSI/ISO/IEC 17024, Conformity assessment — General requirements for bodies operating certification of persons, is a well-established authoritative standard for accrediting organizations that certify people.

A-11 PROCUREMENT INFORMATION (13)

The preceding documents can be purchased from their respective publishers as listed below.

American National Standards Institute, Inc. (ANSI),
25 West 43rd Street, New York, NY 10036
(<http://www.ansi.org>)

The American Society of Mechanical Engineers (ASME),
Two Park Avenue, New York, NY 10016-5990; Order
Department: 22 Law Drive, P.O. Box 2300, Fairfield,
NJ 07007-2300 (<http://www.asme.org>)

The American Society of Safety Engineers (ASSE), 1800
East Oakton Street, Des Plaines, IL 60018
(<http://www.asse.org>)

Architectural and Transportation Barriers Compliance
Board, U.S. (ATBCB), 1331 F Street, NW, Suite 1000,
Washington, DC 20004-1111

Building Officials and Code Administrators
International (BOCA)¹

Elevator World, Inc., 356 Morgan Avenue, P.O. Box 6507,
Mobile, AL 36606

International Code Council (ICC), 500 New Jersey
Avenue, NW, Washington, DC 20001
(<http://www.iccsafe.org>)

International Conference of Building Officials (ICBO)¹

National Fire Protection Association (NFPA),
1 Batterymarch Park, Quincy, MA 02169
(<http://www.nfpa.org>)

Southern Building Code Congress International
(SBCCI)¹

¹ Now available from International Code Council (ICC), 500 New Jersey Avenue, NW, Washington, DC 20001.



NONMANDATORY APPENDIX B

RECOMMENDED QUALIFICATIONS AND DUTIES OF INSPECTOR TRAINEES

B-1 QUALIFICATIONS

An inspector trainee should have the following qualifications:

- (a) ability in written and oral communication as demonstrated by one of, or a combination of, the following:
 - (1) high school diploma or certificate of equivalency
 - (2) aptitude test
 - (3) job experience
- (b) ability to understand mathematical, mechanical, and electrical principles as demonstrated by one of, or a combination of, the following:
 - (1) aptitude test
 - (2) training program
 - (3) technical/vocational school
 - (4) school of higher learning
 - (5) job experience
- (c) physical ability to perform duties in a safe manner

B-2 DUTIES

The duties of an inspector trainee include, but are not limited to, the following:

- (a) acquiring a knowledge of and observing all personal safety practices
- (b) acquiring knowledge and experience to meet the qualifications of inspector, as described in Section 2.1
- (c) performing tasks assigned by an inspector or inspection supervisor
- (d) studying Code requirements related to tasks performed and as assigned by the inspector or inspection supervisor
- (e) studying basic mechanical and electrical principles as they apply to assignments
- (f) clearly and accurately recording the findings of the inspection as directed by the inspector or inspection supervisor
- (g) performing inspections under the direct supervision of an inspector or inspection supervisor
- (h) actively participating in selected meetings, seminars, and education programs



(13)

NONMANDATORY APPENDIX C SAMPLE CERTIFICATION CARD

Front

<p>Photograph of Certified Person</p>	<p>[ACCREDITED CERTIFYING ORGANIZATION'S NAME]</p>
	<p>This is to certify that [Certified Person's Name] is qualified as an [Elevator Inspector/Insp. Supvr.]</p>
	<p>Certification #</p>
	<p>Effective Date:</p>
	<p>Expiration Date:</p>
<p>[Authorized Signature]</p>	

Back

<p>The [Accredited Certifying Organization's Name] hereby certifies that the person to whom this card is issued has fulfilled the requirements of the ASME QEI-1 Standard for the Qualification of Elevator Inspectors.</p> <p>The [Accredited Certifying Organization's Name] has been accredited by [name of accrediting body] to issue this certification.</p> <p>[Accredited Certifying Organization's Name]</p> <p>[Accredited Certifying Organization's Address]</p>
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NONMANDATORY APPENDIX D

MODEL LANGUAGE FOR ENFORCEMENT AUTHORITIES TO RECOGNIZE CERTIFIED INSPECTORS AND INSPECTION SUPERVISORS FROM ACCREDITED CERTIFYING ORGANIZATIONS

(13)

Inspectors and inspection supervisors shall meet the minimum qualifications set forth in the Standard for the Qualification of Elevator Inspectors, ASME QEI-1.

Inspectors and inspection supervisors shall be certified by an accredited certifying organization which certifies inspectors and inspection supervisors, in accordance with the requirements set forth in the Standard for the Qualification of Elevator Inspectors, ASME QEI-1.



NONMANDATORY APPENDIX E

EXEMPLAR CODE OF ETHICS (CONDUCT)

(13)

E-1 General

Accredited certifying organizations should establish a code of ethics (conduct) and means for implementation and enforcement in accordance with

(a) The code of ethics (conduct) should, as a minimum, address the following:

- (1) QEI-1 Standard is to be held paramount
- (2) continuation of professional development
- (3) issue public statements and reports in an objective and truthful manner avoiding
 - (a) misrepresentation or overstatement of qualifications
 - (b) misrepresentation or overstatement of QEI credential(s)
 - (c) misrepresentation or overstatement of findings on reports
 - (d) misrepresentation or overstatement of the scope of inspections conducted
- (4) conflict of interest shall be avoided (see Note)

NOTE: Where an individual may be under an obligation not to report in a fair, objective, and independent manner due to his/her membership, affiliation, or employment with another organization or company having policies, rules, directives, bylaws, agreements, or procedures that prohibit fair, objective, and independent reporting, a conflict of interest would exist. For example, if an individual performing an inspection would be influenced because of a directive from his/her supervisor, or he/she is inspecting equipment on which he/she or a fellow employee works, or on which a competitor works, a conflict of interest would arise.

(5) duty to report violations of the code of ethics (conduct)

(b) The code of ethics (conduct) should be available on the accredited certifying organization's Web site and otherwise publicly and readily available to individuals or organizations utilizing the services and relying on the reports of QEI Inspectors and Inspection Supervisors.

(c) The accredited certifying organization shall establish policies defining conflicts of interest and means and methods for the administration of potential conflicts and disputes (see Nonmandatory Appendix G for an exemplar policy on conflicts of interest).

(d) Interpretation and enforcement of the accredited certifying organization's code of ethics (conduct) are the sole responsibilities of the accredited certifying organization. Appeal of its decision cannot be made to the

ASME A17 QEI Committee or ASME. Each person certified under an accredited certifying organization's program should agree to comply with the code of ethics (conduct).

E-2 Exemplar Code of Ethics (Conduct)

E-2.1 Preamble

(*Name of accredited certifying organization*) promotes adherence to ethical practice by each of its members and recommends the following Code of Ethics (Conduct) of QEI Inspectors and Inspection Supervisors.

E-2.2 Code of Ethics (Conduct) of Inspectors and Inspection Supervisors

E-2.3 The Fundamental Principles

Inspectors and Inspection Supervisors should uphold and advance the integrity, honor, and dignity of the inspecting profession by

- (a) using their knowledge and skill for the enhancement of human welfare
- (b) being honest and impartial and serving with fidelity the public, their employers, and clients and (*name of accredited certifying organization*)
- (c) striving to increase the competence, prestige, and integrity of the inspecting profession

E-2.4 The Fundamental Standards

(a) Inspectors and Inspection Supervisors should hold paramount the safety, health, and welfare of the public in accordance with the QEI-1 Standard in the performance of their professional duties.

(b) Inspectors and Inspection Supervisors should perform services only in the areas of their competence.

(c) Inspectors and Inspection Supervisors should continue their professional development throughout their careers and shall provide opportunities for the professional and ethical development of those inspectors under their supervision.

(d) Inspectors and Inspection Supervisors should act in professional matters for each employer or client as faithful agents or trustees and shall avoid conflicts of interest or the appearance of conflicts of interest.

(e) Inspectors and Inspection Supervisors should build their professional reputations on the merit of their services and shall not compete unfairly with others.



(f) Inspectors and Inspection Supervisors should associate only with reputable persons or organizations.

(g) Inspectors and Inspection Supervisors should issue public statements and reports only in an objective, impartial, and truthful manner.

(h) Inspectors and Inspection Supervisors should consider environmental impact in the performance of their professional duties.

(i) Inspectors and Inspection Supervisors accepting QEI Certification from *(name of accredited certifying organization)* by this action agree to abide by *(name of accredited certifying organization)* Policy on Ethics and procedures for its implementation and accept their duty to report any violations of this Code.

NOTE: If this exemplar Code of Ethics is used by the accredited certifying organization, the use of the word “shall” will apply, instead of “should” to the Inspector or Inspection Supervisor.



(13)

NONMANDATORY APPENDIX F

(NAME OF ACCREDITED CERTIFYING ORGANIZATION) CRITERIA FOR INTERPRETATION OF THE CODE OF ETHICS (CONDUCT)

The criteria for interpretation of the Code of Ethics (Conduct) are guidelines and represent the objectives toward which QEI Inspectors and Inspection Supervisors should strive. They are principles that an Inspector and Inspection Supervisor can reference in specific situations. In addition, they provide interpretive guidance to *(name of accredited certifying organization)* *(insert appropriate board, committee, or group.)*

(a) Inspectors and Inspection Supervisors should hold paramount the safety, health, and welfare of the public in accordance with the QEI Standard in the performance of their professional duties.

(1) Inspectors and Inspection Supervisors should recognize that the lives, safety, health, and welfare of the general public are dependent upon fair, objective, and independent judgments, decisions, and practices incorporated into inspection protocol, procedures, and methods.

(2) Inspectors and Inspection Supervisors should not approve equipment that is not safe to the public health and welfare and not in conformity with accepted safety code standards.

(3) Whenever the Inspectors' or Inspection Supervisors' judgments are overruled under circumstances where the safety, health, and welfare of the public are endangered, the Inspector or Inspection Supervisor should inform their clients and/or employers of the possible consequences.

(4) If Inspectors or Inspection Supervisors have knowledge of or reason to believe that another person or firm may be in violation of any of the provisions of this code of professional conduct, they shall present such information to the proper authority within *(name of accredited certifying organization)* in writing and should cooperate with the proper authority in furnishing such further information or assistance as may be required.

(b) Inspectors should perform services only in areas of their competence.

Inspectors and Inspection Supervisors should undertake to perform assignments only when qualified by education, training, experience, and/or certification on the specific equipment involved.

(c) Inspectors and Inspection Supervisors should continue their professional development throughout their careers and should provide opportunities for the

professional and ethical development of those inspectors under their supervision.

(d) Inspectors and Inspection Supervisors should act in professional matters for each employer or client as faithful agents or trustees and should avoid conflicts of interest or the appearance of conflicts of interest.

(1) Inspectors and Inspection Supervisors should avoid all known conflicts of interest with their employers or clients and should promptly inform their employers or clients of any business association, interests, or circumstances that could influence their judgment or the quality of their services.

(2) Inspectors and Inspection Supervisors should not undertake any assignments that would knowingly create a potential conflict of interest between themselves and their clients or their employers.

(3) Inspectors and Inspection Supervisors should not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed to, and agreed to, by all interested parties.

(4) Inspectors and Inspection Supervisors should not solicit or accept gratuities, directly or indirectly, from contractors, their agents, or other parties dealing with their clients or employers in connection with work for which they are responsible. Where official public policy or employers' policies tolerate acceptance of modest gratuities or gifts, Inspectors and Inspection Supervisors should avoid a conflict of interest by complying with appropriate policies and should avoid the appearance of a conflict of interest.

(5) When, as a result of their inspection, Inspectors believe an elevator or other equipment covered under the ASME A17 codes and standards may not be safe or comply with applicable safety standards, they should so advise their employer or client.

(6) Inspectors and Inspection Supervisors should admit their own errors when proven wrong and refrain from distorting or altering the facts to justify their mistakes or decisions.

(e) Inspectors and Inspection Supervisors should build their reputations on the merit of their services and should not compete unfairly with others.

(1) Inspectors and Inspection Supervisors should not falsify or permit misrepresentation of their, or their



associates', academic or professional qualification or certification. They should not misrepresent or exaggerate their degrees of responsibility, authority, or competence in or for their assignments.

(2) Inspectors and Inspection Supervisors should not maliciously or falsely, directly or indirectly, injure the professional reputation, prospects, practice, or employment of another Inspector or Inspection Supervisor, nor should they indiscriminately criticize another's work.

(f) Inspectors and Inspection Supervisors should associate only with reputable persons or organizations.

(1) Inspectors and Inspection Supervisors should not knowingly associate with or permit the use of their names or clients' names in business ventures by any person or firm that they know, or have reason to believe, are engaging in business or professional practices of a fraudulent or dishonest nature.

(2) Inspectors and Inspection Supervisors should not use association with non-QEI inspectors, corporations, or partnerships to disguise unethical acts.

(g) Inspectors and Inspection Supervisors should issue public statements and reports only in an objective and truthful manner.

(1) Inspectors and Inspection Supervisors should endeavor to extend public knowledge and to prevent misunderstandings of the achievements of the elevator industry.

(2) Inspectors and Inspection Supervisors should be completely objective and truthful in all reports, statements, or testimony. They should include all relevant and pertinent information in such reports, statements,

or testimony. They should not misrepresent or overstate factual information resulting from their inspections, nor should they misrepresent or overstate the scope of their inspection.

(3) Inspectors and Inspection Supervisors should issue no statements, criticisms, or arguments on safety or code matters that are inspired or paid for by an interested party or parties, unless they preface their comments by identifying themselves, by disclosing the identities of the party or parties on whose behalf they are speaking, and by revealing the existence of any financial interest they may have in matters under discussion.

(4) Inspectors and Inspection Supervisors should be truthful in explaining their work and merit and should avoid any act tending to promote their own interest at the expense of the integrity and honor of the inspection profession or another individual.

(h) Inspectors and Inspection Supervisors should consider environmental impact in the performance of their professional duties.

Inspectors and Inspection Supervisors should concern themselves with the impact of their activities on the environment. When the impact is a clear threat to health or safety of the public, then the guidelines for this criterion revert to those of criterion (a) above.

(i) Inspectors and Inspection Supervisors accepting QEI Certification from (name of accredited certifying organization) by this action agree to abide by (name of accredited certifying organization) Policy on Ethics and procedures for its implementation.

NOTE: If this Nonmandatory Appendix is used by the accredited certifying organization, the use of the word "shall" will apply, instead of "should" to the Inspector or Inspection Supervisor.



(13)

NONMANDATORY APPENDIX G EXEMPLAR POLICY ON CONFLICTS OF INTEREST

(NAME OF ACCREDITED CERTIFYING ORGANIZATION) POLICY: CONFLICTS OF INTEREST

I PREAMBLE

Each individual acting for or in the name of (*accredited certifying organization*) as QEI Certified Inspector or Inspection Supervisor for an Authority Having Jurisdiction (AHJ) is in a position of trust. Particularly since (*name of accredited certifying organization*) holds as paramount the safety, health, and welfare of the general public, each such individual has a fundamental responsibility to exercise impartial professional judgment to enhance the QEI-1 elevator inspection profession in the public interest. This (*name of accredited certifying organization*) Policy is intended to further assure the fairness, independence, objectivity, and public confidence in the integrity of all (*name of accredited certifying organization*) and QEI-1 activities by establishing guidelines and procedures concerning conflicts of interest. It is acknowledged and understood that competent and knowledgeable individuals of recognized abilities, qualifications, and interests who participate in QEI-1 activities may have potential conflicts of interest. This (*name of accredited certifying organization*) Policy establishes guidelines and procedures to enable such individuals to act ethically and uphold the integrity of (*name of accredited certifying organization*) policies, rules, codes, and standards.

II POLICY

(a) The potential for a conflict of interest exists whenever a person owes loyalty to multiple interests or organizations. Having different interests or loyalties does not constitute a conflict of interest when the action desired by each interest is the same. This situation may be described as a community of interest.

(b) A conflict of interest occurs when loyalty to one interest would impel a course of action different from that impelled by another interest. For example, while acting for or on behalf of an Authority Having Jurisdiction (AHJ), a QEI Inspector may consider a matter that directly affects the specific rather than the collective interests of the individual's employer, association, affiliation, or a competitor of the employer, association, or affiliation.

Where an individual may be under an obligation not to report in a fair, objective, and independent manner due to his/her membership, affiliation, or employment with another organization or company having policies, rules, directives, bylaws, agreements, or procedures that prohibit fair, objective, and independent reporting, a conflict of interest would exist. For example, if an individual performing an inspection would be influenced because of a directive from his/her supervisor or he/she is inspecting equipment on which he/she works, a fellow employee works, or on which a competitor works, a conflict of interest would arise.

In such instances, there could be a conflict of interest between exercise of the inspector's independent professional judgment on behalf of (*name of accredited certifying organization*), the Authority Having Jurisdiction (AHJ), and the public and the individual's loyalties and responsibilities to his/her employer, association, or another entity.

(c) It is the duty of the QEI Inspector acting for or on behalf of the Authority Having Jurisdiction (AHJ) to be aware of the possibility of a conflict of interest between their responsibilities to the Authority Having Jurisdiction (AHJ) and the public on the one hand and to their employer or another entity on the other. All QEI Inspectors have a fundamental responsibility to refrain from participating in QEI or compliance inspections when a competing interest precludes or inhibits the exercise of the QEI Inspector's independent professional judgment on behalf of (*name of accredited certifying organization*), or the Authority Having Jurisdiction (AHJ), or when the nature of the competing interest is such that the inspector's continued activity would unreasonably jeopardize the integrity, independence, objectivity, or fairness of the inspection.

III RESPONSIBILITIES

(a) *Individual Responsibilities.* In instances where it is clear to individual QEI Inspectors that their judgment with respect to the conducting of fair, objective, and independent inspections is controlled by their loyalty to a competing interest, they should disqualify themselves



and refrain from participating in the activities regarding the conflict-affected matter.

In instances where individual QEI Inspectors and Inspection Supervisors believe that there may be the appearance of a conflict of interest, as in II(c) above, although they believe that their independent judgment will not be affected by a competing interest, the QEI Inspectors and Inspection Supervisors should nevertheless avail themselves of at least one of the following consultative courses of action:

(1) Advise (*name of accredited certifying organization*) of the potential conflict and the details creating the condition. Allow the (*name of accredited certifying organization*) to determine the appropriate course of action within the organization's operating procedures or bylaws and establish limitations, if required, to mitigate the potential results of the conflict.

(2) Advise the Authority Having Jurisdiction (AHJ), employer, or contractor for which the Inspector is performing inspections of the potential conflict and the details creating the condition. Allow the relevant party to determine the appropriate course of action and establish limitations, if required, to mitigate the potential results of the conflict.

(3) (*Reserved for additional requirements or courses of action by the accredited certifying organization.*)

(b) *Challenges by Others.* (Reserved for accredited certifying organization to provide requirements and course of action.)

IV IMPLEMENTATION

Individual QEI Inspectors and Inspection Supervisors have the primary responsibility for assuring their adherence to this (*name of accredited certifying organization*) Policy. Nonetheless, given the sensitive nature of these considerations and in the interest of (*name of accredited certifying organization*) in preserving the integrity of its reputation and processes, (*name of accredited certifying organization*) retains responsibility for oversight in this area. (*Name of accredited certifying organization or name of the responsible body within the accredited certifying organization*) should have authority to review questions of conflicts of interest and to render opinions thereon. (*Name of accredited certifying organization or name of the responsible body within the accredited certifying organization*) may authorize (*name, title, or position of the responsible individual in the accredited certifying organization*) to issue a letter of warning or admonishment to persons who violate this policy and refer the matter to the (*name, title, or position of the responsible individual within the accredited certifying organization*) for processing as an ethics complaint under the Code of Ethics (Conduct) Policy (*or appropriate bylaw provision*). A decision of the (*name of accredited certifying organization*) should be binding and final if a letter of warning or admonishment is the course of action.

V (*NAME OF ACCREDITED CERTIFYING ORGANIZATION*) STAFF

The provisions of this Policy are applicable to (*name of accredited certifying organization*) staff, as well as to the members of (*names of appropriate committees, subcommittees, boards, or decision-making bodies of the accredited certifying organization*) and individuals acting for or on behalf of (*name of accredited certifying organization*), as set forth above.

VI (*NAME OF ACCREDITED ORGANIZATION*) STATIONERY

(*Insert accredited certifying organization policy on use of stationery here.*)

VII NOTICE

Each time an individual is certified to the QEI-1 standards by (*name of accredited certifying organization*), the individual should at the time of certification be sent a copy of this Policy and (*name of accredited certifying organization*) Code of Ethics (Conduct) and should be advised to adhere to the provisions of these policies and codes when performing the duties of a QEI Inspector or Inspection Supervisor.

VIII ACCEPTANCE

Before receiving certification or renewing his/her certification, unless there is in (*name of accredited certifying organization*) files a prior signed acceptance of this Policy, each QEI Inspector or Inspection Supervisor should state, in writing, adherence to the conditions of this Policy and the Code of Ethics (Conduct). If this signed statement is not on file, the member may not be certified.

Note that when either this Policy or the Code Of Ethics (Conduct) receives substantive revision as determined by (*name of accredited certifying organization*), all persons required to have a Conflict of Interest Statement on file should receive a copy of the revised documents and should be requested to sign a new Conflict of Interest Statement.

IX OVERSIGHT

Once each year, the (*title/position of the responsible individual*) of (*name of accredited certifying organization*) should submit a report to the (*name of responsible body within the accredited certifying organization*) certifying that the requirements of VII, Notice, and VIII, Acceptance, have been met and should include names of those not in compliance.

Should there be any occurrence where an Inspector or Inspection Supervisor does not resign a Conflict of Interest Statement and forward it to (*name of accredited*



certifying organization) within 90 days, the *(name, title, or position of the responsible individual with the accredited certifying organization)* should inform the member in writing that he/she is in violation of VIII of this Policy and may not continue as a QEI Certified Inspector or Inspection Supervisor. Such written notification should be placed in the member's record until the signed Conflict of Interest Statement is supplied by the individual.

When action is taken by an individual to comply with this Policy, that individual will be certified or recertified

provided that all other requirements for certification or renewal of certification are met.

Responsibility: *(Name of Accredited Certifying Organization)*

Adopted: *(Date of Adoption)*

NOTE: If this Nonmandatory Appendix is used by the accredited certifying organization, the use of the word "shall" will apply, instead of "should" to the Inspector or Inspection Supervisor.



ASME QEI-1 INTERPRETATIONS

Replies to Technical Inquiries January 2010 Through October 2011

FOREWORD

This publication includes all of the written replies issued between the indicated dates by the Secretary, speaking for the ASME QEI Committee on Qualification of Elevator Inspectors, to inquiries concerning interpretations of technical aspects of the QEI-1 Standard.

These replies are taken verbatim from the original letters, except for a few typographical corrections and some minor editorial corrections made for the purpose of improved clarity. In some instances, a review of the interpretation revealed a need for corrections of a technical nature; in these cases a corrected interpretation follows immediately after the original reply.

These interpretations were prepared in accordance with the accredited ASME procedures. ASME procedures provide for reconsideration of these interpretations when or if additional information is available that the inquirer believes might affect the interpretation. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME committee or subcommittee. ASME does not “approve,” “certify,” “rate,” or “endorse” any item, construction, proprietary device, or activity.



Interpretation: 13-01

Subject: ASME QEI-1–2007, Continuing Education Units

Date Issued: January 5, 2010

Question: Is the list in para. 2-3(f)(2) an exclusive list of a way to obtain Continuing Education Units (CEUs)?

Reply: No, this is a helpful list to obtain CEUs that was developed using training technologies available at the time the Standard was developed. Paragraph 2-3(f) states: “obtain 1.0 continuing education unit (CEU) on an annual basis by participating in continuing education and professional development activities acceptable to the QEI accredited certifying organization (para. 4-2.2). Continuing education credit may be awarded for a wide variety of activities that involve training, education, or other endeavors wherein the objective includes achieving relevant professional knowledge, skills, and abilities beyond those required for initial certification.”

Interpretation: 13-02

Subject: ASME QEI-1–2007, Paras. 2-1(p) and 2-2(d)

Date Issued: May 21, 2010

Question (1): Does para. 2-1(p) require inspectors to have the applicable codes on site and available for reference when performing inspections?

Reply (1): No. Paragraph 2-1(p) requires “access” to current editions of the documents referenced in para. 1-5(a) as defined in section 1-2.

Question (2): Does para. 2-2(d) require inspectors to have the applicable codes on site and available for reference when performing inspections?

Reply (2): No. Paragraph 2-2(d) requires the inspector to “maintain” his or her personal copy of the QEI-1 Standard to be the latest edition as well as the current edition of the documents referenced in para. 1-5(a) and defined in section 1-2.

Question (3): What is the definition of “personal possession”?

Reply (3): “Personal possession” is not defined in section 1-2 of the QEI-1 Standard.



Interpretation: 13-03

Subject: ASME QEI-1-2010, Paras. 2.2(a) and 2.2(b)

Date Issued: September 22, 2010

Question (1): Where the words “witnessing tests” are used in paras. 2.2(a) and 2.2(b), is it intended that the “duty of the inspector” is to be physically present to verify the test results prior to certifying the test results as described in para. 2.2(c)(1)?

Reply (1): Yes.

Question (2): When the inspector is not physically present, is it acceptable for the inspector to certify the results of a test per para. 2.2(c)(1) based solely on an elevator mechanic’s written or verbal confirmation of the test results?

Reply (2): No.

Interpretation: 13-04

Subject: ASME QEI-1-2010, Para. 4.2.5, Control of Certification Documentation, and Para. 4.2.6, Disputes and Appeals

Date Issued: May 4, 2011

Question (1): Is the term “effective date,” as indicated on the Elevator Inspector’s Certification Cards per QEI-1-2010, para. 4.2.5(d), the date certification was initially issued by that Certifying Organization to that individual?

Reply (1): The term “effective date” is not defined in the QEI-1 Standard.

Question (2): In para. 4.2.6, Disputes and Appeals, are disputes defined as disagreements between an Elevator Inspector (or Inspection Supervisor) and the Certifying Organization regarding that individual’s certification status?

Reply (2): The term “dispute” is not defined in the QEI-1 Standard.

Question (3): In para. 4.2.6, Disputes and Appeals, are complaints defined as a challenge issued by any individual in the industry or general public to a Certifying Organization regarding the qualifications of a certified person?

Reply (3): The term “complaint” is not defined in the QEI-1 Standard.

Question (4): In para. 4.2.6, Disputes and Appeals, are Certifying Organizations expected to notify ASME in the event of a dispute in the same way as complaints are required to be reported?

Reply (4): This is not addressed in the QEI-1 Standard.

Question (5): In para. 4.2.6, Disputes and Appeals, are individuals in the industry or general public who issue a complaint required to be notified of the results of adjudication and are such persons afforded the same appeal mechanism as granted in the case of disputes?

Reply (5): This is not addressed in the QEI-1 Standard.



Interpretation: 13-05

Subject: ASME QEI-1–2010, Section 1.2, Definitions, and Para. 2.3(f)(2)(a)

Date Issued: October 12, 2011

Question (1): Does the definition of continuing education credit in the ASME QEI-1–2010 Standard require that there be one hour of classroom instruction per 0.1 CEU?

Reply (1): No. There are additional ways of accruing CEUs; see para. 2.3(f).

Question (2): Does para. 2.3(f)(2)(a) require that CEUs be granted at not more than the rate of 0.1 CEUs for each clock hour of attendance at a training program for the purpose of maintaining inspector qualifications?

Reply (2): Yes.

Question (3): What are the implications for attendees regarding receiving a certificate with 0.8 CEUs when the actual classroom hours were only equivalent to 0.575 CEUs?

Reply (3): The Standard does not address this issue.

Question (4): What are the obligations of attendees regarding reporting this inconsistency to ASME?

Reply (4): The Standard does not address this issue.

Question (5): Is attendance at an online webinar acceptable for obtaining the CEUs necessary to maintain inspector qualifications?

Reply (5): Yes, if approved by the accredited organization.

Interpretation: 13-05 (Reconsideration)

Subject: ASME QEI-1–2010, Section 1.2, Definitions, and Para. 2.3(f)(2)(a)

Question (1): When the manner in which the CEU is accrued is by a person's physical presence in a physical classroom setting with a live in-person instructor providing the instruction, does QEI-1–2010 require that there be one hour of classroom instruction per 0.1 CEU?

Reply (1): Yes.

Question (2): Would an in-person training program that consisted of less than 8.0 hr of instruction violate any provision of the QEI-1–2010 document if a Certificate of Completion were issued for 0.8 CEUs?

Reply (2): Yes; see para. 2.3(f)(2)(a).

Question (3): What is the name and the contact information of the individual within ASME to whom an interested party should file a complaint regarding the issuance of a Certificate of Completion for 0.8 CEUs when only 5.75 hr of classroom instruction was provided?

Reply (3): ASME Staff Secretary, QEI Standards Committee.

Question (4): Would the QEI Standards Committee have the authority to investigate and potentially take disciplinary action against an accredited QEI organization for violating any of the provisions of the QEI-1–2010 document?

Reply (4): No, this is not within the Scope of this Committee.



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